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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/542,652

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Toru Shiozaki

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EXAMINER

SINGH, DALZID E

ART UNIT

PAPER NUMBER

2613

MAIL DATE

DELIVERY MODE

12/17/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/542,652

Applicant(s)

SHIOZAKI ET AL.

Examiner

Dalzid Singh

Art Unit

2613

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5, 8, 10, 11, 14, 20, 23, 29, 31-36, 38, 41 and 47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 10, 31, 33 and 34 is/are rejected.
- 7) ☒ Claim(s) 5, 8, 11, 14, 20, 23, 29, 35-38, 41 and 47 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 July 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3, 10, 31, 33 and 34 are rejected under 35 U.S.C. 102(b) as being anticipated by Epworth (US Patent No. 6,626,589).

Regarding claim 1, Epworth discloses an optical packet exchanger for switching a transmission path for an optical packet which constitutes a burst-type optical signal, as shown in Fig. 2, comprising:

an optical transmitter section for transmitting an optical packet, on which an information signal and an address signal corresponding to a transmission destination for the information signal are superposed by different modulation methods; an optical transmission section for propagating an optical packet transmitted from the optical transmitter section (col. 2, lines 37-40); and

a router section for receiving the optical packet via the optical transmission section, and switching a transmission path for the optical packet based on the address signal which is extracted from the optical packet (see col. 2, lines 55-59).

Regarding claim 2, wherein, the optical transmitter section includes:

a light source for outputting continuous light (it is inherent that there exist light source to output continuous light); and

an optical modulation section for outputting an optical packet which is obtained by subjecting the output light from the light source to an intensity modulation using the information signal and a phase modulation using the address signal, the router section (see col. 2, lines 37-40) includes:

an optical splitter section for splitting the optical packet received via the optical transmission section into two optical packets (see col. 2, lines 49-53);

an address reading section for reading the address signal based on phase information of one of the optical packets output from the optical splitter section (col. 2, lines 46-65); and

a path switching section having a plurality of output ports and selecting, based on the address signal read by the address reading section, one of the plurality of output ports from which to output the other optical packet output from the optical splitter section (see Fig. 2).

Regarding claim 3, wherein, the optical transmitter section includes:

a light signal source for outputting continuous light having been subjected to an intensity modulation using the information signal (it is inherent that the there is a light source to output the light signal); and

an optical modulation section for outputting an optical packet which is obtained by subjecting the output light from the light signal source to a phase modulation using the address signal (col. 2, lines 37-40), and the router section includes:

an optical splitter section for splitting the optical packet received via the optical transmission section into two optical packets (col. 2, lines 46-65);

an address reading section for reading the address signal based on phase information of one of the optical packets output from the optical splitter section (col. 2, lines 46-65); and

a path switching section having a plurality of output ports and selecting, based on the address signal read by the address reading section, one of the plurality of output ports from which to output the other optical packet output from the optical splitter section (see Fig. 2).

Regarding claim 10, wherein, a modulation speed for the address signal and a modulation speed for the information signal are different (as disclose by Epworth there are different modulations for data and header therefore the speed are different).

Regarding claim 31, the optical transmitter section includes:

a light source for outputting continuous light (it is inherent that there exist light source to output continuous light); and

an optical modulation section for outputting an optical packet which is obtained by subjecting the output light from the light source to a phase modulation using the

information signal and an intensity modulation using the address signal (col. 2, lines 37-40), and the router section includes:

- an optical splitter section for splitting the optical packet received via the optical transmission section into two optical packets (see Fig. 2);

- an address reading section for reading the address signal from intensity information of one of the optical packets output from the optical splitter section (see col. 2, lines 46-65); and

- a path switching section having a plurality of output ports and selecting, based on the address signal read by the address reading section, one of the plurality of output ports from which to output the other optical packet output from the optical splitter section (see Fig. 2).

Regarding claim 33, Epworth discloses a router for switching a transmission path for an optical packet which constitutes a burst-type optical signal and on which an information signal and an address signal corresponding to a transmission destination for the information signal are superposed by different modulation methods, as shown in Fig. 2, the router comprising:

- an optical splitter section for splitting the optical packet into two optical packets (see Fig. 2);

- an address reading section for reading the address signal based on phase information of one of the optical packets output from the optical splitter section (see col. 2, lines 46-65); and

a path switching section having a plurality of output ports and selecting, based on the address signal read by the address reading section, one of the plurality of output ports from which to output the other optical packet output from the optical splitter section (see Fig. 2).

Regarding claim 34, further comprising an optical phase adjustment section for adjusting a phase of the other optical packet output from the optical splitter section to a constant phase value based on the address signal read by the address reading section, and thereafter outputting the other optical packet to the path switching section (see col. 2, lines 46-65).

Allowable Subject Matter

3. Claims 5, 8, 11, 14, 20, 23, 29, 32, 35-38, 41 and 47 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ferguson et al (US Pub. No. 2002/0191251) is cited to show all optical switching routing system.

Chang et al (US Patent No. 6,657,757) is cited to show high-throughput low-latency next generation internet network using optical label switching and high-speed optical header generation detection and reinsertion.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dalzid Singh whose telephone number is (571) 272-3029. The examiner can normally be reached on Mon-Fri 9am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

December 10, 2007

DALZID SINGH
PRIMARY EXAMINER
Dalzid Singh